

**MIL Is On With DTC P0420 or P0430****SYMPTOM**

The MIL is on with DTC P0420 or DTC P0430 (catalyst system efficiency below threshold) with a possible DTC P2243 or DTC P2247 (A/F sensor 1 circuit high voltage).

**POSSIBLE CAUSE**

One or both primary A/F Sensor (Air Fuel Ratio) caps may have fallen off and bored a hole through the affected WU-TWC (Warm Up Three Way Catalyst).

**VEHICLES AFFECTED****2010 MDX:**

From VIN 2HNYD2...AH518583 thru  
2HNYD2...AH521143

**2010 TL 2WD:**

From VIN 19UUA8...AA018467 thru  
19UUA8...AA019599

**2010 TL AWD:**

From VIN 19UUA9...AA006991 thru  
19UUA9...AA007357

**2010 ZDX:**

From VIN 2HNYB1...AH503166 thru  
2HNYB1...AH503413

**CORRECTIVE ACTION**

Replace the affected primary A/F sensor and WU-TWC, then find the missing A/F sensor cap from the under floor TWC.

**PARTS INFORMATION****All Models**

EGR Pipe Lower Gasket (front WU-TWC replacement):  
P/N 18719-R70-A01

EGR Pipe Upper Gasket (front WU-TWC replacement):  
P/N 18716-R70-A01

Front Primary A/F Sensor:  
P/N 36531-R70-A02

Lower WU-TWC Gasket:  
P/N 18212-SA7-003

Rear Primary A/F Sensor:  
P/N 36541-R70-A01

Self-Locking Nut (8 mm) (four required):  
P/N 90212-RCA-A01

Self-Locking Nut (10 mm) (12 required):  
P/N 90212-SA5-003

Spindle Nut (rear WU-TWC replacement):  
P/N 90305-S3V-A11

Upper WU-TWC Gasket:  
P/N 18115-R70-A01

**MDX**

Castle Nut (rear WU-TWC replacement):  
P/N 90365-STX-A00

Cotter Pin (rear WU-TWC replacement):  
P/N 90701-S3V-A01

Front WU-TWC:  
P/N 18190-RYE-A10

Intermediate Shaft Snap-Ring  
(rear WU-TWC replacement):  
P/N 44319-STX-A60

Rear WU-TWC:  
P/N 18290-RYE-A10

Under Floor TWC Gasket:  
P/N 18393-SJA-A01

**TL**

Castle Nut (rear WU-TWC replacement):  
P/N 90363-TK4-A01

Cotter Pin (rear WU-TWC replacement):  
P/N 94201-30220

Check Bolt (M/T):  
P/N 90442-397-000

Drain Washer (A/T) (rear WU-TWC replacement):  
P/N 90471-PX4-000

Drain Washer (M/T) (rear WU-TWC replacement):  
P/N 94109-20000

Fill Washer (A/T) (rear WU-TWC replacement):  
P/N 90441-PK4-000

Fill Washer (M/T) (rear WU-TWC replacement):  
P/N 94109-20000

Front WU-TWC (2WD):  
P/N 18190-R70-A10

Front WU-TWC (AWD):  
P/N 18190-RK2-A00

Intermediate Shaft Snap-Ring (A/T)  
(rear WU-TWC replacement):  
P/N 44319-SD4-010

Intermediate Shaft Snap-Ring (M/T)  
(rear WU-TWC replacement):  
P/N 44319-STX-A60

Rear WU-TWC (2WD):  
P/N 18290-R70-A00

Rear WU-TWC (AWD):  
P/N 18290-RK2-A00

Under Floor TWC Gasket (2WD):  
P/N 18393-SDB-A00

Under Floor TWC Gasket (AWD):  
P/N 18302-SP0-003

**ZDX**

Castle Nut (rear WU-TWC replacement):  
P/N 90365-STX-A00

Cotter Pin (rear WU-TWC replacement):  
P/N 90701-S3V-A01

Drain Washer (rear WU-TWC replacement):  
P/N 90471-PX4-000

Fill Washer (rear WU-TWC replacement):  
P/N 90441-PK4-000

Front WU-TWC:  
P/N 18190-RYE-A10

Intermediate Shaft Snap-Ring  
(rear WU-TWC replacement):  
P/N 44319-STX-A60

Rear WU-TWC:  
P/N 18290-RYE-A10

Under Floor TWC Gasket:  
P/N 18393-SJA-A01

**REQUIRED MATERIALS**

Moly 60 Paste:  
P/N 08734-0001

High Temp Urea Grease:  
P/N 08798-9002

ATF fluid (4 quarts):  
P/N 08200-9008A

M/T fluid (3 quarts):  
P/N 08798-9031A

**TOOL INFORMATION**

Ball Joint Remover:  
T/N 07MAC-SL0A102

Ball Joint Thread Protector:  
T/N 071AF-SZVA000

O2 Sensor Socket Wrench (commercially available):

## WARRANTY CLAIM INFORMATION

The normal warranty applies.

### MDX

OP#	Description	FRT
1201K5	<b>Procedure A</b> -Replace the front WU-TWC, primary A/F sensor, and check the TWC for cap (includes diagnosis).	2.4 hr
1201K6	<b>Procedure B</b> -Replace the rear WU-TWC, primary A/F sensor, and check the TWC for cap (includes diagnosis and alignment).	1.6 hr

### TL

OP#	Description	FRT
1201K5	<b>Procedure A</b> -Replace the front WU-TWC, primary A/F sensor, and check the TWC for cap (diagnosis included).	1.3 hr
1201K6	<b>Procedure B</b> -Replace the rear WU-TWC, primary A/F sensor, and check the TWC for cap (includes diagnosis and alignment).	1.9 hr

### ZDX

OP#	Description	FRT
1201K5	<b>Procedure A</b> -Replace the front WU-TWC, primary A/F sensor, and check the TWC for cap (includes diagnosis).	1.3 hr
1201K6	<b>Procedure B</b> -Replace the rear WU-TWC, primary A/F sensor, and check the TWC for cap (includes diagnosis and alignment).	1.9 hr

Failed Part: P/N 36541-R70-A01

Defect Code: 07801

Symptom Code: 03203

Skill Level: Repair Technician

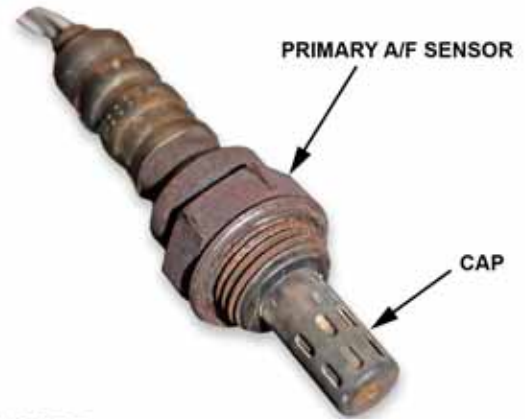
### DIAGNOSIS

1. Connect the HDS to the vehicle and check for DTCs P0420 or P0430.

NOTE: **In addition** to DTCs P0420 or P0430, you may also see DTCs P2243 or P2247 stored; the A/F sensor tip may have broken off the A/F sensor.

2. Remove the primary A/F sensor located on top of the affected catalytic converter. For example: If DTC P0420 is stored remove the rear (bank one) primary A/F sensor.
3. Check for a missing cap from the primary A/F sensor.

**GOOD**



**NO GOOD**



- If DTC P0430 is stored and the cap is missing from the front (bank two) primary A/F sensor, go to REPAIR PROCEDURE A
- If DTC P0420 is stored and the cap is missing from the rear (bank one) primary A/F sensor go, to REPAIR PROCEDURE B.
- If the cap is not missing, this bulletin does not apply. Continue with normal troubleshooting.

## ELECTRONIC SERVICE MANUAL PROCEDURES

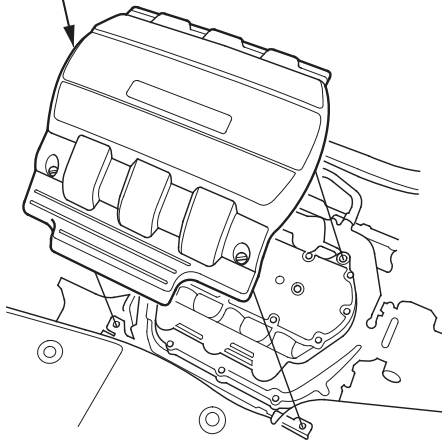
The following procedures have been used in full or in part within this service bulletin. For more detail on them, and torque specifications for some components, refer to the appropriate electronic service manual.

- Condenser Fan Removal/Installation
- A Pipe Removal/Installation
- Driveshaft Removal/Installation
- Warm Up TWC Removal/Installation
- Under Floor TWC Removal/Installation

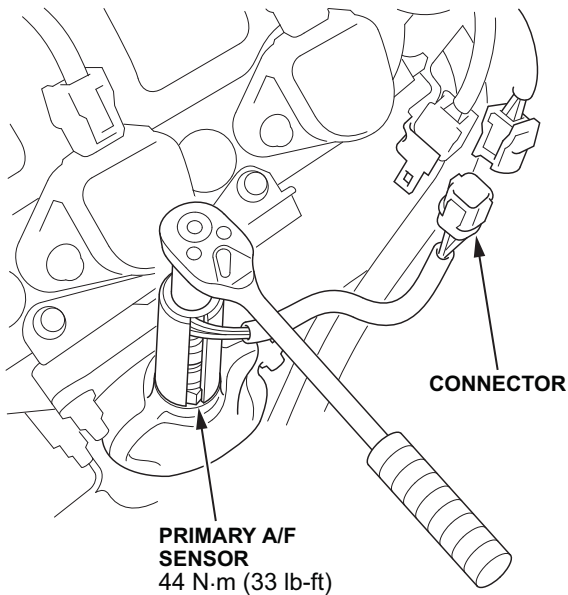
## REPAIR PROCEDURE A

1. Remove the engine cover.

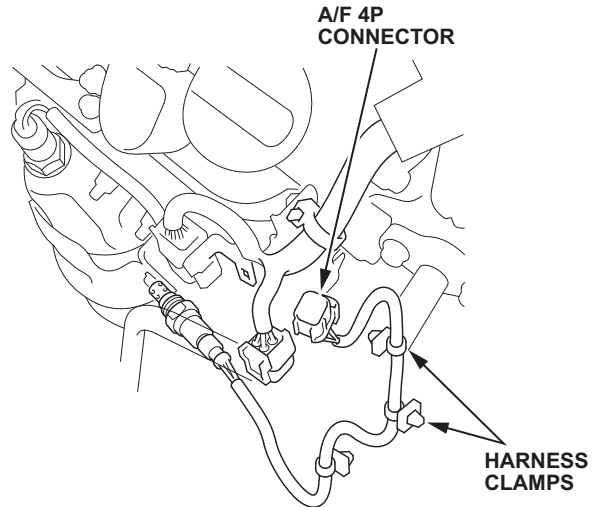
ENGINE COVER



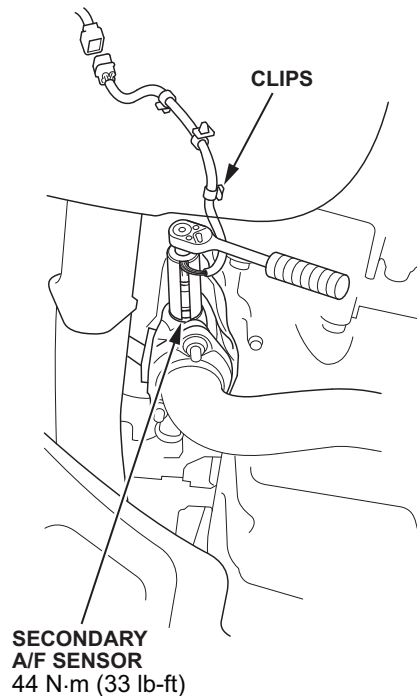
2. If not already disconnected, disconnect the 4P connector and remove the front primary A/F sensor.



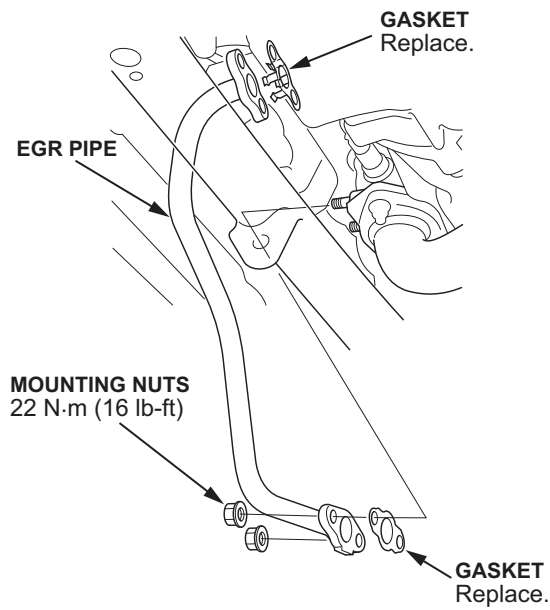
3. Disconnect the 4P connector and remove the harness clamps securing the front WU-TWC secondary A/F sensor harness.



4. Remove the front secondary A/F sensor.

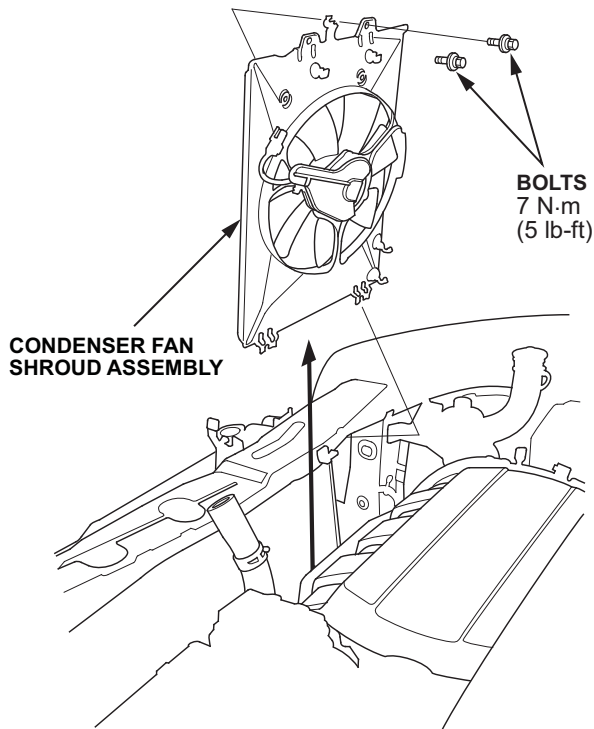


5. Remove the EGR pipe.

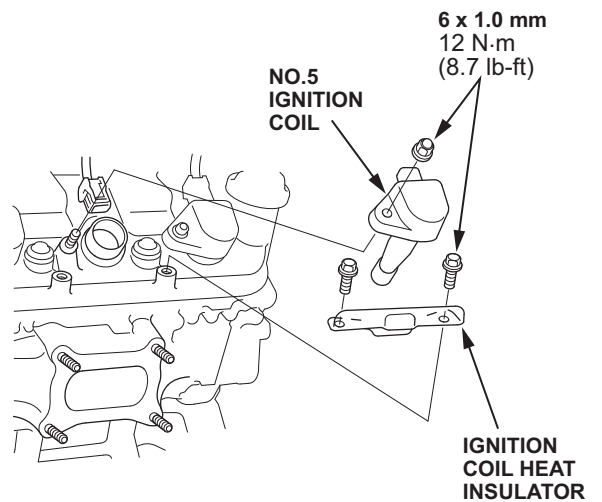


6. If necessary, remove the A/C condenser fan shroud assembly.

**NOTE:** Place an appropriate size piece of cardboard in front of the radiator that protects the radiator from damage when removing the front catalytic converter.



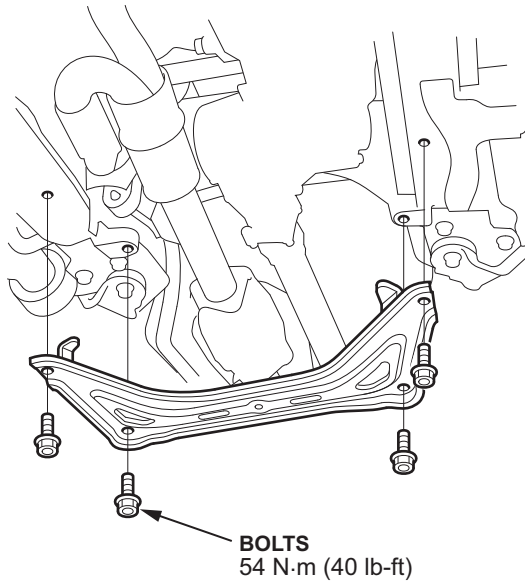
7. Remove the No. 5 ignition coil and the ignition coil heat insulator.



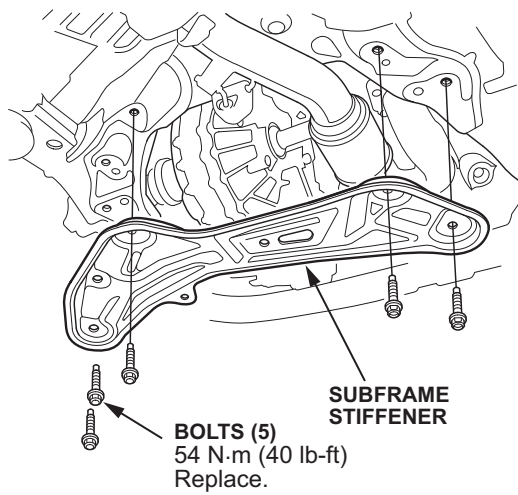
8. Raise the vehicle.

9. Remove the front subframe stiffener.

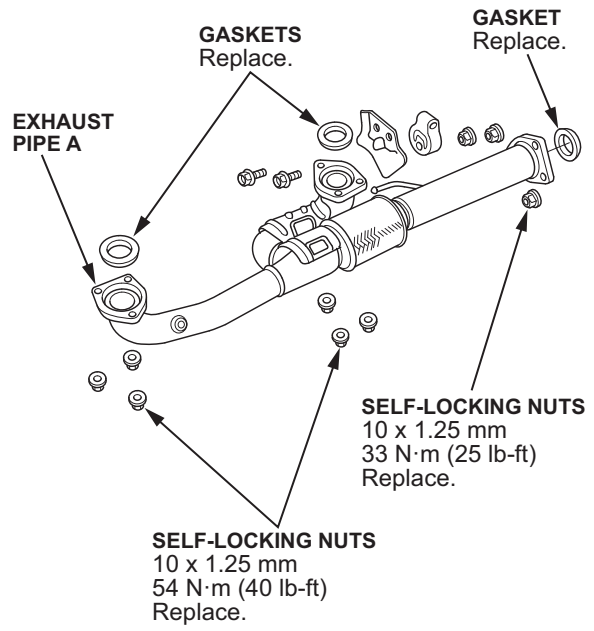
**MDX/ZDX:**



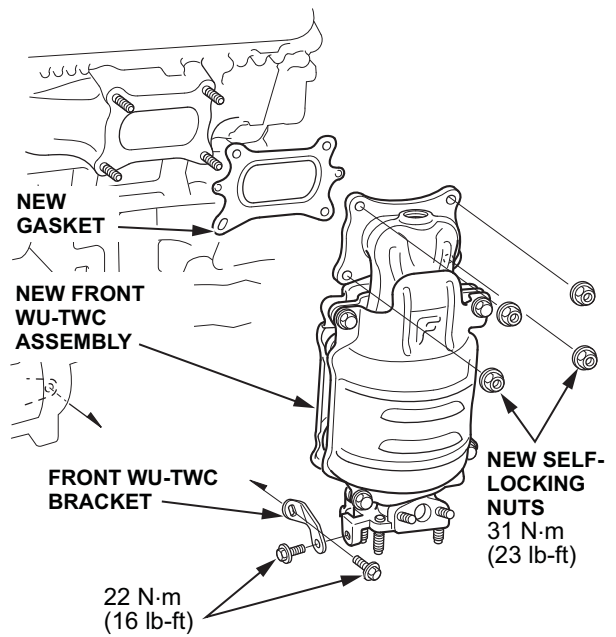
**TL:**



10. Remove the exhaust pipe hangers, then remove the exhaust pipe A.



11. Remove the front WU-TWC.

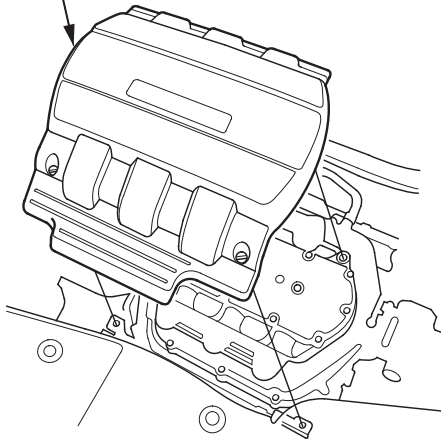


12. Go to UNDER FLOOR TWC and check for the missing primary A/F sensor cap.

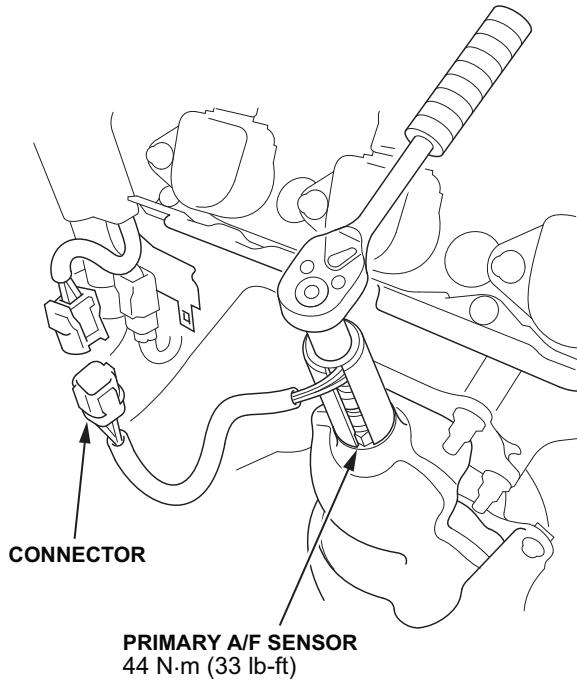
## REPAIR PROCEDURE B

1. Remove the engine cover.

ENGINE COVER



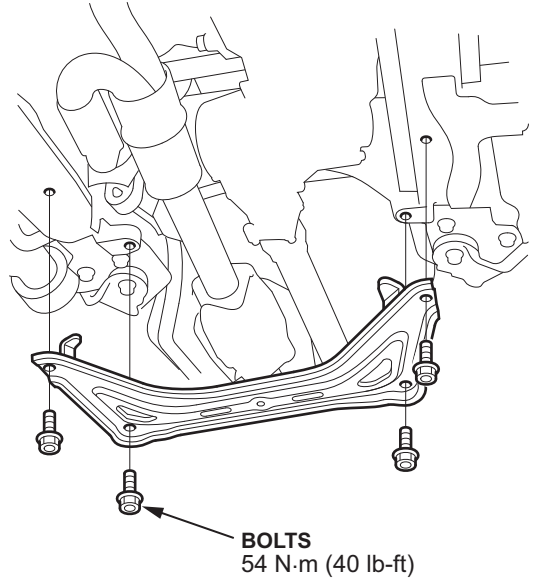
2. Disconnect the connector and remove the rear primary A/F sensor.



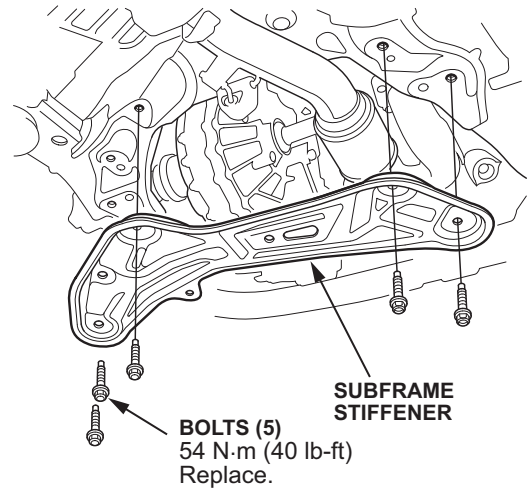
3. Raise the vehicle.

4. Remove the front subframe stiffener.

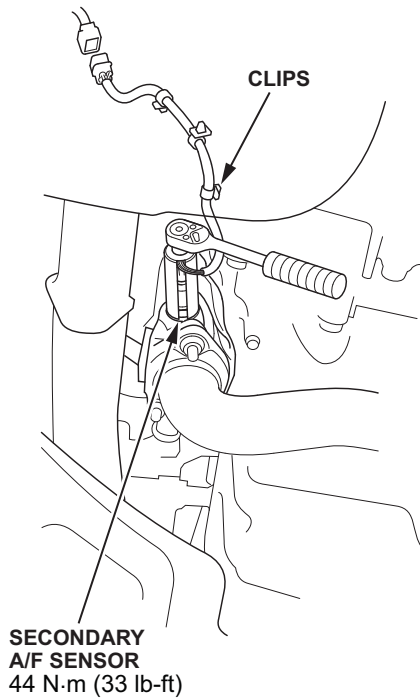
**MDX/ZDX:**



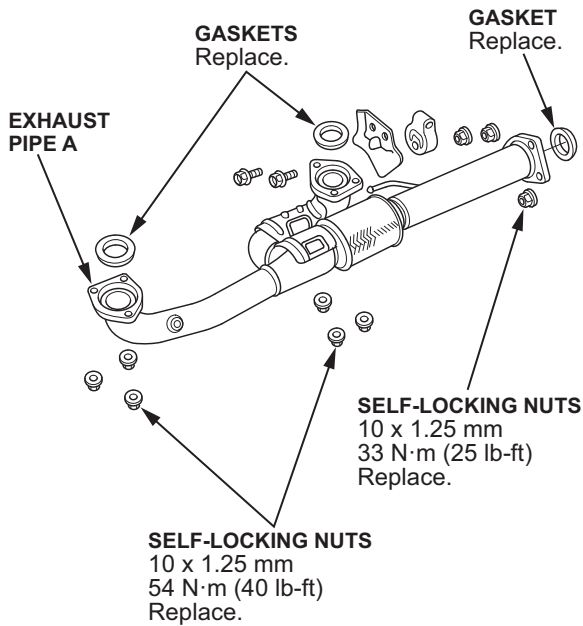
**TL:**



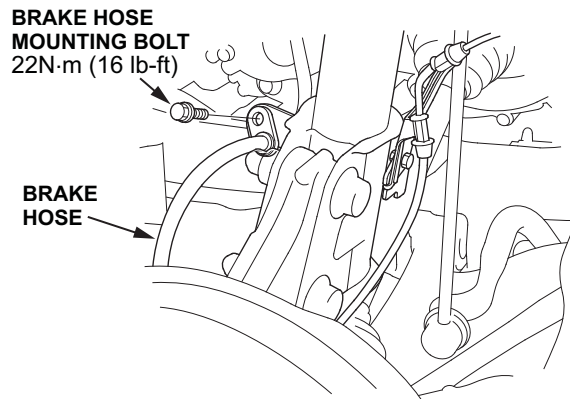
5. Remove the rear secondary A/F sensor.



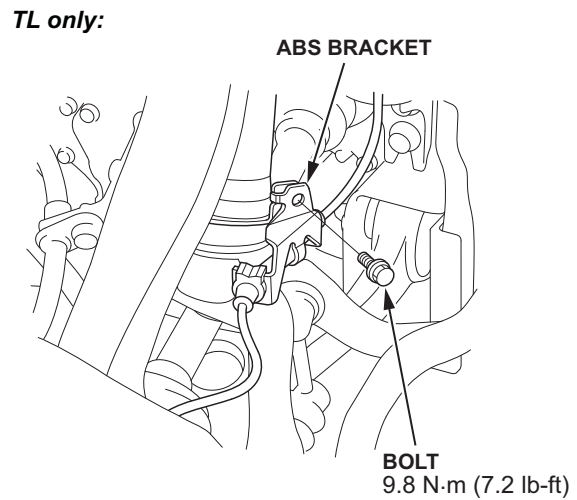
6. Remove the right front wheel.  
7. Remove the exhaust pipe hangers then remove the exhaust pipe A.



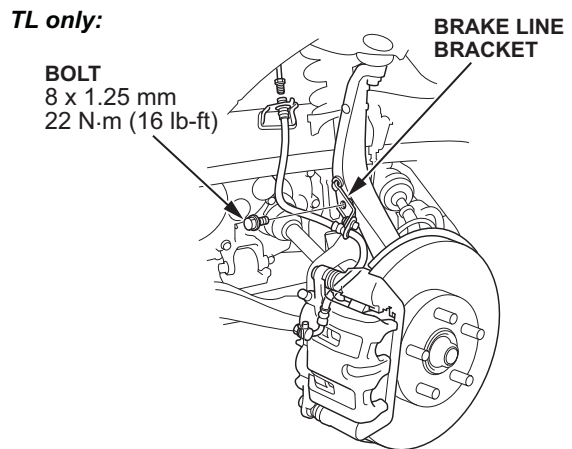
8. *MDX and ZDX:* Remove the brake hose mounting bolt from the right damper.



9. *TL only:* Remove the ABS bracket from the damper.



10. *TL only:* Remove the brake line bracket from the damper.





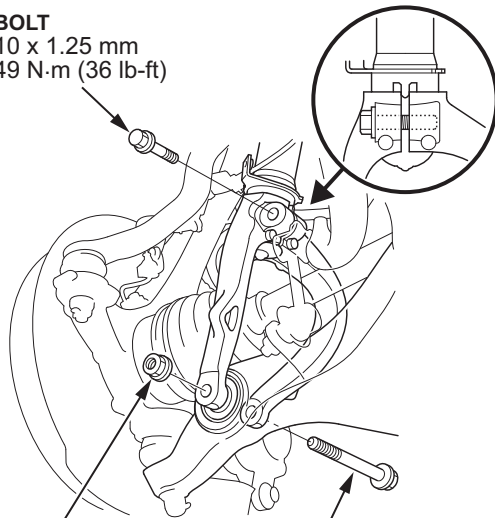
11. *TL only*: Remove the right damper fork.

***TL only***:

**BOLT**  
10 x 1.25 mm  
49 N·m (36 lb-ft)

**NUT**  
10 x 1.25 mm  
64 N·m (47 lb-ft)  
Replace.

**BOLT**  
Replace.



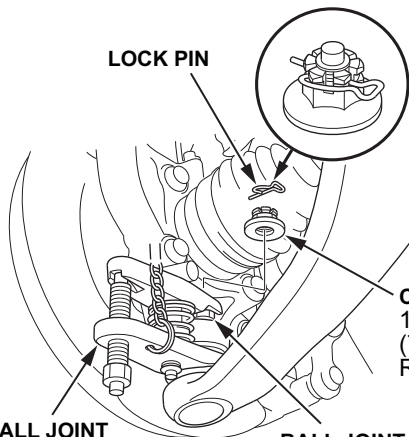
12. Separate the right lower ball joint.

**LOCK PIN**

**CASTLE NUT**  
103 - 113 N·m  
(75.9 - 83.2 lb-ft)  
Replace.

**BALL JOINT  
REMOVER, 32 mm  
07MAC-SL0A102**

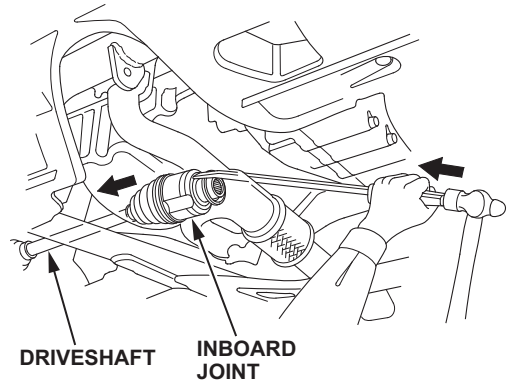
**BALL JOINT THREAD  
PROTECTOR, 14 mm  
071AF-S3VA000**



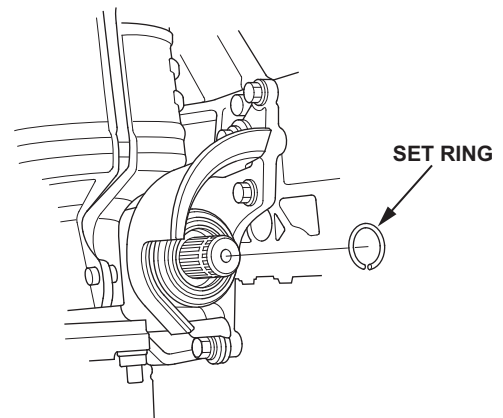
13. Remove the spindle nut.

14. Remove the right driveshaft.

**NOTE:** Drive the inboard joint off the intermediate shaft using a drift and hammer. **Do not** pull on the driveshaft or the inboard joint may come out.



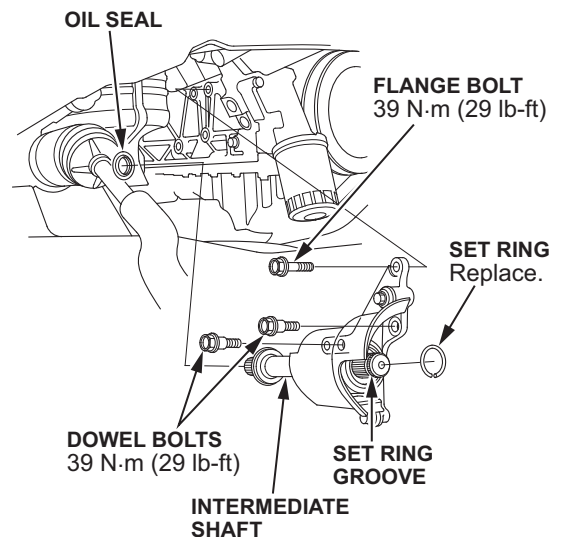
15. Remove the set ring from the intermediate shaft.



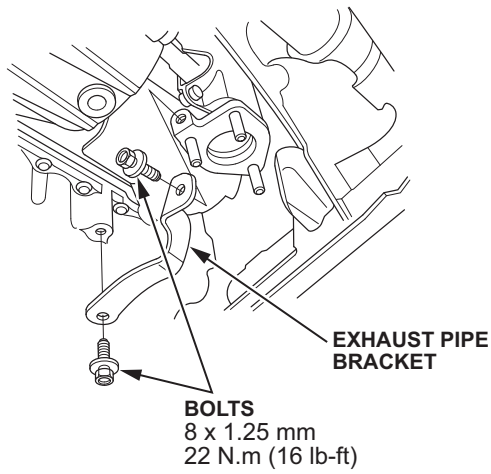
16. *TL and ZDX*: Drain the transmission fluid.

17. *TL and ZDX*: Remove the intermediate shaft from the differential.

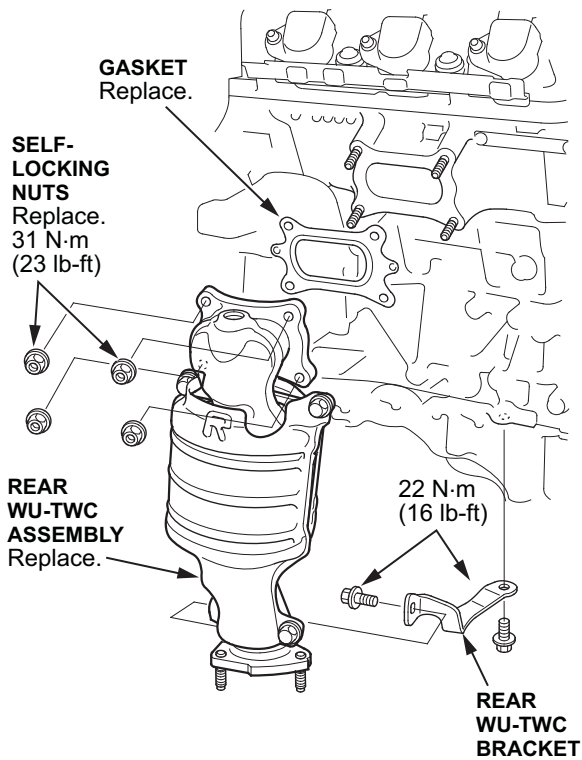
**NOTE:** Hold the intermediate shaft horizontal until it is clear of the differential to prevent damaging the oil seal.



18. Remove the rear WU-TWC exhaust pipe bracket.



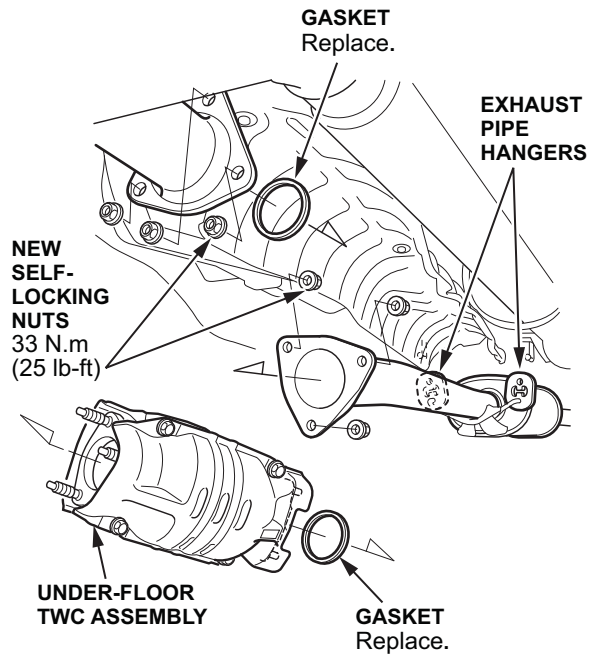
19. Remove the rear WU-TWC.



20. Go to UNDER FLOOR TWC and check for the missing A/F sensor cap.

## UNDER FLOOR TWC

1. Remove the under floor TWC.



2. Search the under floor TWC for the missing primary A/F sensor cap and remove it.
3. Install all parts in the reverse order of removal.
4. Check wheel alignment and adjust if necessary.